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The effects of word study: a developmental and discovery based approach to spelling

Jessica Wright
Rowan University

THE EFFECTS OF WORD STUDY: A DEVELOPMENTAL AND DISCOVERY BASED APPROACH TO SPELLING

by
Jessica Wright

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ABSTRACT

Jessica Wright
THE EFFECTS OF WORD STUDY: A DEVELOPMENTAL AND DISCOVERY BASED APPROACH TO SPELLING
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DR. Randall Robinson
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The purpose of this academic investigation was to find the effect of Word Study on the spelling abilities of third grade students; and to determine if the change in spelling abilities is greater in those third graders who receive the treatment of guided on-level instruction and interactive word activities than those third grade students who participated in a traditional spelling program. Orthographic knowledge of the treatment and control groups were measured through a series of pretests and then post tested after treatment was received. The treatment involved a variety of interactive activities that were discovery based. The positive change in the treatment group (n=2) was significantly greater than the positive change in the control group (n=6). The greatest significance was found in the change of the two groups at their level of existing orthographic knowledge. The sample size was too small to be statistically significant, but the implications for the study are discussed.

Acknowledgements

The completion of this body of work was a labor of love. It often seemed there was no end in sight. The work was difficult but unbelievably rewarding and informative. It is with this in mind I would like to acknowledge those people who supported me and this project.

Ileen and Thomas Wright, my parents, have offered moral and financial support that goes beyond what any twenty-seven year old is still owed by a parent. They have continued to put my problems and needs before their own. Both of them have listened, or at least pretended to listen to, countless monologues regarding the topic at hand. In addition to being my parents, they have let me into their lives as a friend and given me their love and support. They have also allowed me to be a friend to them and I hope my future will honor them. Finally, they have remained a source of laughter and perspective throughout this project and the ongoing project I call my life.

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This past year I have had the good fortune of finding a new friend and 'career soul mate'. No one could possibly have understood my excitement and frustrations as much as Ann Marie Germani, my classmate. Ann Marie has allowed me to barge into her life and usurp great amounts of her time and energy with my constant barrage of phone calls and after class discussions, at times leaving her with little more then a few hours of sleep

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Scope of Study

Introduction

The importance of spelling in schools cannot be over emphasized, as spelling knowledge and abilities increases; word recognition and production become automatic. This allows for students to concentrate their reading efforts on comprehension and their writing efforts on expression (Ganske, 2000). This premise is supported by "Examinations of children's spelling [which] have garnered support for the relatedness of spelling and reading, suggesting the two share a common base – orthographic knowledge – and should be taught in a more integrated fashion (Ehri, 1980, 1987; Gill, 1992; Juel, Griffith, & Gough, 1986; Morris & Perney, 1984; Zutell & Rasinski, 1989)" (Ganske, 2000, p. 42). Numerous studies have shown that spelling knowledge develops along a continuum (Beers, 1980; Beers & Henderson, 1977; Ganske, 1999; Read, 1971; Schlagel, 1989; Templeton, 1983;). However, many classrooms continue to relegate spelling a list of preplanned words, unrelated to curriculum or students' spelling abilities (Ganske, 1999). Systematic teaching of spelling at children's existing spelling understanding is a more productive and successful means of instruction (Bear, Invernizzi, Templeton, & Johnston, 2000; Ganske, 1999).

Statement of the Problem

Current classroom practices often fail to teach students based on their existing knowledge. Despite the studies, which have shown the success of child-centered

spelling, instruction in schools remains a secondary focus, often unrelated to other aspects of the curriculum. Additionally, classrooms remain focused on the use of memorization as a means of spelling instruction. This type of instruction fails to engage students and again fails to teach them at their level of spelling knowledge. The solution to this current situation may very well be a systematic approach to spelling called Word Study. Word Study can be defined as several things, this particular project will focus on word study as it has been used and written about by Kathy Ganske: "a student-centered approach to phonics, spelling, and vocabulary instruction that actively engages the learner in constructing concepts about the way words work" (Ganske, 2000, p. 332).

- Do students really benefit from a spelling program that is centered on their existing knowledge?
- Will a student who engages in Word Study become a better speller?
- Can you incorporate relevant content vocabulary in a Word Study program?

Statement of the Hypothesis

According to recent research findings a systematic approach to spelling beginning at a student's existing spelling knowledge is a more productive and successful means of instruction (Bear, Invernizzi, Templeton, & Johnston, 2000; Ganske, 1999). This is practical because research has also shown that spelling knowledge develops along a continuum (Beers, 1980; Beers & Henderson, 1977; Ganske, 1999; Read, 1971; Schlagel, 1989; Templeton, 1979; Templeton, 1983). It was hypothesized that third graders who participate in a word study program, guided on-level instruction and interactive word

activities, will have a greater positive change in their spelling abilities than third graders who do not participate.

Limitations of the Study

While this study was conducted in the most professional, ethical and careful manner, limitations and possible affects should be noted.

1. The program adopted for the study was set forth in Kathy Ganske's (1999) book, Word Journeys: Assessment-Guided Phonics, Spelling, and Vocabulary Instruction. This project was not conducted by an expert in the area of Word Study and the researcher's experience using the program was gained while engaged in the project. Additionally, the research was limited by the fact that this project was conducted in conjunction with the researcher's student teaching. The research was perhaps compromised by the inexperience of the researcher in the general field of education who was learning the various aspects of teaching while conducting this experience.
2. The research was conducted during the student teaching experience of the researcher and in addition to the aforementioned limitations this imposed there were several other restrictions imposed due to this unique situation. This inevitably limited the study because there was an existing classroom schedule to be followed. It was not always easy to find time during the day to engage the students in Word Study activities. Therefore, there may not have been enough opportunity for the subjects to interact with the words each week. Also, because of the time during which this study was conducted, the students

were also responsible for their existing classroom spelling requirements (daily spelling homework and weekly spelling pretest and tests).

3. Students had not previously engaged in the type of Word Study activities that were used during the study. There was a certain amount of explanation, which was necessary before each new activity was introduced. This took time away from the actual activities. Also, the limited time in which the study was conducted. In an ideal situation, students would spend the entire year working on Word Study, but in this situation the students only spent ten weeks involved in the various activities.
4. Finally, the two students who were involved in this study were extremely low ability students. One student was classified during the study and it was decided that the other student would be retained.

Limitations of time, lack of exposure to this type of learning, the inexperience of the researcher as both teacher and student of Word Study, and the limitations of the subjects have all had an affect on this study. The results therefore, need to be reviewed with this in mind.

Definitions of Terms

The following is a list of definitions for the various terms, which have been used throughout the paper.

Blind Sort: A word sort that is completed "blindly" – namely, without looking at the words. Words that exemplify the characteristic of each feature category are placed in front of the student as key words. As someone calls out the words to be sorted, the student records the word under the appropriate category word. This is done to encourage students to use sound clues and their memory for particular spelling patterns.

Closed Sort: Word sorts that rely on predetermined categories for classifying words. Pictures can also be used for closed sorts.

Concentration: Word cards are all placed face down. Students take turns picking up a card and trying to match the feature. For example, if the student picked up the card with *chop* on it then they would find a match with *chat* but not *shot*, *cash*, or *much*. They took turns with each word until there was a winner.

Derivational Constancy Spelling Stage: The last stage of spelling development. Spellers study relationships between derived forms of words-namely, between words that share a common root. They learn that many spelling patterns remain constant across derived forms despite changes in sound. The *g* in *sign* is retained because of its meaning connection with *signal*.

Developmentally Appropriate Spelling Instruction: Instruction that is targeted at a child's stage of spelling development, where learning is likely to be maximized.

Developmental Spelling: Children progress in their knowledge of the English spelling system from concrete letters and sounds to more abstract pattern and meaning relationships.

Developmental Spelling Assessment (DSA): A dictated word inventory designed to determine students' stage of spelling development and to highlight strengths and weaknesses in their knowledge of specific spelling features so that appropriate instruction can be planned.

Feature Inventory: A dictated word inventory that is part of the Developmental Spelling Analysis. The inventory is used to assess an individual's (or group's) knowledge of specific spelling features within the various stages of spelling development so that instruction can be tailored to meet identified needs.

Letter Name Spelling Stage: The second stage of spelling development in which students begin to represent beginning, middle, and ending sounds with letters that are phonetically accurate. Letter choice is often based on the sound of the letter's *name* rather than on the more abstract letter-sound association. Thus, *y* may be used to represent the first sound in *wet*, because the letter's name produces a "wuh" sound. The name of the correct letter, *w* ("double-u"), bears no resemblance to the desired sound.

Orthographic/Orthography: Literally, "straight" or "correct" (*ortho*) "writing" (*graphy*). Orthography refers to the writing system of a language. Some writing systems are based on ordered characters or symbols. English orthography relies on correct sequences of letters, standard spelling.

Phonemic Awareness: An awareness of individual speech sounds. Students who are phonemically aware can produce rhyming words and words that start with the same sound.

Phonics: Typically, if refers to the instructional practices for teaching beginning readers sound –symbol relationships.

Screening Inventory: A component of the Developmental Spelling Analysis. A 20-word dictation list that is composed of words at the letter name, within word pattern, syllable juncture, and derivational constancy stages. It is used to identify an individual's stage of spelling development.

Speed Sort: Word or picture sort intended to help students internalize spelling patterns. Through repeated, timed trials, sorting of the features becomes automatic.

Stage of Spelling Development: Five periods or stages of spelling development are described – emergent, letter name, within word patter, syllable juncture, and derivational constancy. *Stage of spelling development* refers to the stage at which a student uses spelling features but uses them inconsistently. It is where instruction should be focused, because the learner is ready to acquire new understandings.

Stage Score: On the DSA, the number of correctly spelled inventory words at a given stage of spelling development.

Syllable Juncture Spelling Stage: The fourth stage of spelling development. Students work with words of more than one syllable. They learn how syllables join when to double a final consonant or drop a final *e*; they also learn to extend their vowel pattern knowledge and to correctly represent vowel sounds in unstressed syllables.

Within Word Pattern Spelling Stage: The third stage of spelling development. Students at this stage move beyond strict one-letter-one-sound correspondences and learn to spell by pattern. A primary instructional focus is the marking of long vowels (*gave, wait, tray*, and *vein*), but other vowel and consonant patterns also receive attention (*dart, boil, crouch, caught, and pitch, fudge*, and *squid*).

Word Hunt: A word study activity in which students apply their knowledge of spelling features being studied, by hunting through text they have already read for words with the same spelling features.

Word Study: A student-centered approach to phonics, spelling, and vocabulary instruction that actively engages the learner in constructing concepts about the way words work.

Word Walk: A teacher-guided introduction to a word feature. Through teacher modeling and guided practice, students are "walked" through words to discover sound, pattern, and meaning principles related to the features under study. Word walks usually include word identification discussion, sorting, and much student thinking and reflection about words.

(Ganske, 1999, p. 324-332)

Chapter Two

A Review of the Literature

Introduction

In order for children to become competent spellers they must make discoveries and connections with words by engaging in activities that concentrate on words they can read and manipulate. Word Study is a child-centered approach to spelling. It begins instruction at a level students are comfortable with. Word Study programs, compared with traditional spelling instruction of memorizing arbitrary lists of words, provide students with a more authentic learning process. This study aims to find out if third graders who engage in Word Study have a greater positive change in spelling abilities than third graders who follow a traditional spelling program. Two students spent several months working on Word Study activities such as word sorts, word games, and word hunts. What follows is a description of traditional spelling instruction and the Word Study method.

The History of Spelling Instructions

Beginning with Noah Webster's spelling book, published in 1783, the role of words has been relegated to memorization of word lists. Words were seen as having little or no logic or pattern to their spelling. The study, or memorizing, of words was separated from the rest of language arts curriculum and certainly from other content area studies. It was not until the 1950s, when research findings concluded that English words consisted of logical patterns that the nation began to change its view on the nature of words.

However, throughout the late twentieth century, spelling and vocabulary instruction was still relegated to the role of memorization. During this time the lists of words changed to reflect patterning that was being promoted by research (Coiner, 1995). Recently however, there has been a push to embed spelling and vocabulary into the language arts curriculum. In addition, there are those who wish to authenticate students' dealings with words by integrating spelling and vocabulary across content. What follows is an introduction to the history of spelling and vocabulary as well as a description of current movements.

Throughout modern education, the study of words has focused to a great extent on spelling. Rote memorization was the standard instruction strategy well into the twentieth century. In 1783, Noah Webster's Blue-Backed Speller was published. Webster, in his book, promoted this type of spelling instruction. He based this on his belief that there was no logical patterning in English spelling. He even went as far as to change the spelling of words as he put them in his now famous dictionary (Coiner, 1995).

In 1919, Ernest Horn supported Webster's beliefs as well as existing teaching practices regarding rote memorization. He conducted studies on frequency lists and routines. He found that, "English spelling was under-principled, and that words were learned as arbitrary sequences of letters that have no logic behind them" (Coiner, 1995, p. 4). This theory and the research, which supported it, were accepted into the twentieth century (Coiner, 1995). It was not until the 1950s that the Stanford Studies disproved Horn's theories and research.

The studies found that there were more "patterns than madness in [the] spelling system" (Coiner, 1995, p. 4). The studies used computers that were programmed with

spelling rules and then asked to sort 17,000 words the computers were very successful. These tests verified greater letter/sound regularity than previously believed (Coiner, 1995). These findings were further supported by the studies of Charles Read and Carol Chomsky. During the 1970s, the two found that words, which have related meanings, are often related in spelling as well, despite dissimilarities in how the words sound. In the 1980s the Developmental Theory focused on the stages of the development of aspects of spelling for learners (Coiner, 1995).

Edmund Henderson's research, "revealed five distinct stages of spelling development" (Coiner, 1995, p. 5). The five stages are as follows: (1) preliterate phonetic stage; (2) phonetic or letter name stage; (3) within-word pattern stage; (4) syllable juncture stage; (5) derivational constancies stage (Coiner, 1995). Further strengthening this research was Robert Schlegel's study on how learners learn to spell. Schlegel found that skill of spelling acquisition is, "progressive and developmental, and the focus of difficulty shifts as principles and pattern are mastered and new ones appear" (Coiner, 1995, p. 5). In this sense children go from simple words to more complex words through frequency of there occurrence to these students. Schlegel's research was replicated many times since 1982 and was then built upon by the connectionist theory. This theory was based on computer modeling that showed a progression, "in spelling development from single letters, to letter patterns, to syllables, and finally morphemic units" (Coiner, 1995, p 8).

The research, which supports the logical patterns of words, has altered the view of spelling and language arts instruction. However, the debate over the last fifty years among literacy professionals has not reached a consensus as to the best method for

promoting word knowledge (Anderson, 1996, p. 9). There has been a movement away from selecting words for students to simply memorize. Word selection and word engagement have become of greater concern to teachers in their vocabulary instruction and teachers are using this research in an attempt to integrate word instruction into their language arts curriculum. The professionals still debate whether formal spelling programs that run parallel with reading and writing; phonics instruction which is anchored in early reading instruction; or word level instruction in a holistic language curriculum is the means for students to become proficient with words (Allington & Cunningham, 1999; Beck, McKeown, & Kucan 2002).

The Shortcomings of Traditional Methods

Research, which has looked at the traditional approach to spelling, has been shown to fail to engage students' interests. According to John Ianacone (1993) the distribution of word lists on Monday morning followed by the students merely defining the words and then being tested on them that Friday, "not only wastes time, but also minimizes opportunities to stimulate student thinking and may actually turn students off to the potential beauty and fascination of language study" (p. 41). According to the research of Janet Bloodgood (1992) of the University of Virginia, "memory is not a sufficient tool to make spelling meaningful and lasting" (p. 204). Some students are able to memorize very quickly the words and in turn engage very little with these words so they apply no meaning to them. Other students must struggle just to memorize the spelling of the words and therefore they also do not engage the meaning of these words (Bloodgood, 1992).

In addition to her comments on the wastefulness of sheer memorization as a means to teach spelling and vocabulary, Bloodgood (1992) has affirmed that the memorizing of words also fails to engage students in an understanding of how the features of words work. When held by students, this type of knowledge will enable them to have a greater understanding of how words work and provide them the tools to spell with greater ease. She says that, "only when students have internalized words through repeated use, or when they have explored and tested the underlying 'rules' of how words work, until understanding becomes automatic, do students really 'know words'" (Bloodgood, 1991, p. 206). It is also true that in the past it was accepted that word recognition and word production was two distinct skills, which came from two separate cognitive sources. More recent research has found that these two skills come from a centralized source, but demand different cognitive actions. These findings further support the integration of spelling and vocabulary development into the language arts curriculum. Based on the current research being conducted about words and vocabulary there has been a movement to pull away from traditional word instruction and move towards a more holistic, engaging, and interactive embedding of words within the language arts curriculum and other content areas (Allington and Cunningham 1999; Beck; McKeown, & Kucan 2002; Fountas & Pinnell 2001).

Spelling and the Connection to Literacy

According to Richard Allington and Patricia Cunningham, (1999), reading and writing are both dependent on words because words are the building blocks of these two skills. This type of common sense and research-supported theory has further turned educators away from treating vocabulary and spelling as separate from language arts

curriculum. "In discussing young children's writing development, Strickland and Morrow (1989) emphasize the need for an integrated language program: 'What [children] learn from one aspect of the language arts is used to explore and develop others (p427)'" (Bloodgood, 1991 p. 208). According to Standal and Schaefer (1978), vocabulary improvement is most successful when directly taught and should be instructed across content and in meaningful context, as it would be when integrated into language arts and other content area curriculums.

"Spelling research has focused on the necessary intercorrelaton of reading, writing, and spelling (Henderson, 1985; Wilde, 1990). Students function effectively only with written language that they understand. Therefore, it makes sense that the three aspects of written language – reading, writing, and spelling – be considered aspects of an integrated unit. [Instruction should be matched to a students' word knowledge in all three aspects]. In this way, what the students reads will provide the vocabulary for what the student spell, which in turn, will support writing. In their case study the teacher used everything in her room as a resource for students. "kept a teaching log from which her daily instructional decisions were made, based on her observations of the students' reading and writing attempts. She responded to student's developmental needs by introducing appropriate word patterns in her instruction" (Anderson, 1997, p. 13).

Spelling is an important aspect of vocabulary development, language arts and students' overall education. The holistic approach to this vocabulary holds an important role for spelling. In his 1995 article, Coiner points out that, "there is a strong relationship between spelling skill and reading ability" (p. 9). He goes on to reference studies conducted by Zutwell and Rasinski who have found that these two concepts have a,

"common body of conceptual work knowledge underlies both disciplines" (Coiner, 1995, p 9). Spelling needs to be taught as a task in a manner, which is sensible and interesting, so that is, reinforces the relationships between spelling and reading ability (Bloodgood, 1992, p. 204-205). Students need to develop their spelling ability over time, and this ability is directly related to the, "richness of students' experience with words" (Fountas & Pinnell, 2001, p. 374). "Sample words from actual reading and writing experiences, use learning activities that involve students in constructing their understandings of how spelling words (e.g. Generating and sorting word families, hunting for words), depend on a print rich environment (e.g. word wall) and assess students' word knowledge continuously (e.g. looking at students invented spelling" (Anderson, 1997, p. 10). "Interactive approaches can allow spelling to become a functional part of an integral language arts curriculum" (Bloodgood, 1991, p. 204).

The Birth of Word Study

When words are encountered repeatedly and continuously students learn more about the meaning of words, and in turn come to a greater understanding of their meaning, beginning with, "seeing it as totally unfamiliar to placing it within a rich network of understanding that includes subtle shades of meaning, connotations, even historical origins or geographically specific meaning" (Fountas and Pinnell, 2001, p. 375). "Spelling research has focused on the necessary intercorrelaton of reading, writing, and spelling (Henderson, 1985; Wilde, 1990). Students function effectively only with written language that they understand. Therefore, it makes sense that the three aspects of written language – reading, writing, and spelling – be considered aspects of an integrated unit. [Instruction should be matched to a students' word knowledge in all three aspects].

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Word study has come to the front of integrating words within the language arts curriculum. Different literacy experts define Word Study differently. But there are enough commonalities that clear parameters can be defined. Following is a discussion of word study.

As defined by Marica Invernizzi, Mary Abouzeid, and Janet Bloodgood in their 1997 contribution to *Language Arts*, "[w]ord study in an integrated language arts program uses the words actually read and written by students. Instruction begins with words from texts, provides opportunities to manipulate the same words out of context, then returns to tests to find other words that exemplify the same spelling-meaning connections" (p. 191). Janet Elliot and Kimberly Rietschel see word study as, "an organized instructional program for phonics, vocabulary, and spelling at the developmental level" (Elliot & Rietschel, 1999, p. 3). Here Elliot and Rietschel recognizes the varying needs of students in a give classroom and describes the developmental level as the, "what students know about written words: what they look like, how they sound, what they mean, and how they are used (Elliot & Rietschel, 1999, p. 3). One of the assets of word study it that individual programs can and should be tailored to accommodate varying strengths and weaknesses of students.

The focus of word study according to Fountas and Pinnell (2001), "is not so much about learning individual words as it is about learning how written language is organized how written language 'works'" (p. 369). The go on to discuss the type of instruction that word study provides and how this explicit instruction is, "directed toward helping students learn how to learn words can greatly enhance the speed, quantity, and quality of vocabulary development" Fountas & Pinnell, 2001, p. 376).

Students engage in activities of word study that lead them to discovering the features of words. In doing this spelling becomes a meaningful activity (Bloodgood, 1997, p. 208). Through a careful and systematic engagement with phonics, vocabulary, and spelling, that is provided by word study, instruction helps students, "expand the categories by making connections among words and drawing out important principles that they know in a deep way" (Fountas & Pinnell, 2001, p. 369). Finally Fountas and Pinnell promote the vast amount of word learning that comes as students read, especially once armed with a set of tools to decode and create words (Fountas & Pinnesll, 2001, p.376).

In his survey of word study literature, Coiner (1995) found there to be nine components of word study programs: student corrected pretests, post-tests, achievement groups, word sort exercises, games, individualized instruction, morphemes and root words, integrated spelling and language arts, designated time for instruction (Coiner, 1995, p. 9-13).

Word study involves word-play activities and categorization sorts, which assist students investigate the patterns in words while becoming knowledgeable spellers who no longer need to rely solely on memory (Bloodgood, 1997, p. 204). Students use word banks: card collection of known words garnered from materials read. The also have individual word notebooks:

collections of words by types and patterns (Bloodgood, 1997, p. 206). After becoming proficient in word sorts students move onto word hunts: searching for examples of a given feature within their texts, they are using (Bloodgood, 1997 p. 207).

Chapter Three

Procedures and Design

Introduction

It is hypothesized that third grade students who engage in a Word Study program that is centered on their existing knowledge and ability will have a greater positive change than third grade students who do not participate in Word Study but rather just memorized an arbitrary list of words. In order for children to make gains as spellers they must make discoveries and connections with the words they engage in. The purpose of this study is to discover the accuracy of the previous statements which are representative of the existing relevant literature.

Subjects

The experiment took place between February and May of 2003. Participants included a third grade class. The initial group was made up of eighteen students. The population consisted of nine girls and nine boys. There were five African American students; eleven Caucasian students; and two Hispanic American students. The school is located in a low socio-economic area and is a Title I school. The students are eager learners, enjoy school, and have an overall positive disposition.

After the initial spelling tests were given two female students were selected for the study. They were the two students who scored lowest on the initial screenings. The decision was made to use them in the study because it was felt that they stood to benefit the most from the extra attention. Both girls are below average students. However, they are both very hard workers and quite bright. As was previously mentioned, during the

study one of the students was classified and it was decided the other student would be retained the following year.

Procedure

The aim of this study is to measure the effects, if any, of word study on students' spelling skills. The study was conducted during my student teaching assignment, using my class as the sample population. Pretreatment orthographic spelling knowledge was assessed by a pretest (see appendix A). This information was then used to assess the specific features with which low scoring students were comfortable. This subset of students was picked from the sample population to receive systematic word study assistance based on their individual strengths and weaknesses. The final step was to compare the pretreatment and post-treatment results of the whole class.

The study was conducted using the method researched and developed by Kathy Ganske and put forth in her book Word Journeys: Assessment-Guided Phonics, Spelling, and Vocabulary Instruction (Ganske, 2000). A detailed explanation of the procedures used can be found in chapter two of this book.

Week One

The entire class was given the Screening Inventory (see appendix A). The Screening Inventory was developed by Ganske to determine a child's stage of development. The Inventory was administered in the manner of a regular spelling test: a word was said, then used in a sentence, and finally said again. Students were encouraged to try and spell every word, and they were informed that this was not a graded test. The Inventory is broken up into four sections containing five words each. The first section

contains words from the Letter Name Stage, then the Within Word Stage, the Syllable Juncture Stage, and finally the Derivational Constancy Stage.

The inventories were then scored according to the procedures laid out in Ganske's book (2000, p. 28-32). Students were awarded a point for each word they spelled correctly, however if a child spells less then one word correctly in any set of five the rest of the paper is not scored. The score is marked on the top of the paper and the students' stages were determined (see appendix A for a copy of the Screening Inventory and breakdown of the Inventory Scoring). The Screening Inventory was used to determine which Feature Inventory students should complete. However, everyone who scored between the Letter Name Stage and Within Word Stage took both of those Inventories even if they scored above or below the Stage. This was done to maintain fairness and equity. It was also done because it was easier at the time to give the whole group both Feature Inventories instead of moving students around.

Week Two

During this second week the students who scored between the Letter Name and Within Word Stages were given the Feature Inventories for both those stages. These Inventories were given in the same manner that the Screening Inventory was given. However, the scoring for these Inventories was quite different (see appendix A for a copy of the Letter Name and Within Word Stages, along with the scoring procedures).

To score the Feature Inventory two points are given for every word spelled correctly, one point for every word where the whole word is spelled incorrectly but the targeted feature is spelled correctly, and zero points if the word and feature are missed. For example: if the word *cat* is spelled *cat*, then two points were given; if the word *cat*

was spelled *kat* but the feature targeted was short vowels then the student received one point; if the same word was spelled the same way and the feature was beginning letters then the student received a score of zero.

After assessing all the students' work there were two students who scored well below the rest of the group. It was decided that these students would be the Word Study Group. This decision was made by myself and my cooperating teacher who felt that since this project was to be something extra, it was most fair to assist those students who needed the greatest support. The two girls selected to participate scored in the earliest stage, which is Letter Name. The stage gets its name from the sound students depend on to spell, the name of the letter.

Weeks Three and Four

Features: *ch* and *sh*

The features selected were the digraphs *ch* and *sh were* and were chosen based on the approximate abilities and needs of the students. It was important to start out with features with whom the students would feel comfortable. Unfortunately, the features chosen did not seem to be features with which the students were comfortable. Also, the features selected were too similar in sound to provide students with a wide enough gap to see and hear the different sounds the features were making. The features selected were too advanced. In addition to a poor selection of features the words themselves were problematic. The words chosen were a mixture of onset digraphs as well as words ending in the digraphs. This all proved very difficult for the students (see appendix B for list of words for Week Three).

Day One: The students began with a Word Walk. The lesson would begin by showing the students index cards with the words printed on them, to make sure they could read all the words and were familiar with their meaning. Following, cards with the feature words were placed on a desk and the students and researcher began to sort the words. The researcher held up a card and each student would take a turn reading it by the researcher alternating who saw the word first every other word. The feature words were *chop*, *much*, *shop*, and *dish*, featuring the digraphs *ch* and *sh* at the beginning and ending of words. The word *shuck* was removed from the list because the students were completely unfamiliar with the word. All the words were sorted by the students and researcher under one of the four feature words as a group. Immediately following this the students were given their own index cards and they had to sort the words themselves.

Day Two: The second day the students sorted the words on their own using the same features, this is called a closed sort because the categories are predetermined. The students did this independently and then checked each other's work. When they were confident they were correct they recorded the words on a sheet of paper under the appropriate features (see appendix B).

Day Three: The third day students played *Concentration*. All the cards were placed face down on the ground. Each student took a turn picking up a card and trying to match the feature. For example if the student picked up the card with *chop* on it then they would find a match with *chat* but not *shot*, *cash*, or *much*. They took turns with each word until there was a winner.

Day Four: On the forth day the students went on a word hunt. Each student was given a photocopy of a short story and several poems and they had to highlight any words

they found with the features in it. This was a modified version of a word hunt. A word hunt usually would send the students into familiar literature and have them find, discuss, and then record the words they found. This type of word hunt was used later in the study. It was easier for them to start off with literature predetermined to contain the features and that they could write on rather than copy onto another piece of paper, a way of introducing this new concept to them.

Day Five: The girls did the same closed sort they had done on day two. Day five was a Monday and a good day to review the features.

Day Six: The students met again with the researcher and completed a blind sort. The blind sort was done using the chalkboard. The researcher called the words out to the girls, they said them quietly to themselves and then recorded them on the board. Following the blind sort, they were asked to think of additional words they new with our features in them. They came up with words such as: *churh*, *chicken*, *touch*, *shoe, shine*, and *rash*. However, they also came up with words such as: *match* and *hatch*. They were also struggling with hearing the difference between the *ch* and *sh*.

Day Seven: The student played Concentration again.

Day Eight: The subjects went on another word hunt, however this time they had to look through books they had read, find words, discuss them, and then add them to their list.

Day Nine: No word study activities were engaged in

Day Ten: The girls went on a word hunt around the classroom and recorded words they found written on the bulletin boards, walls, and written on pictures.

Week Five and Six

Features: *th* and *sh*

It was very clear after the first features were selected that their sound was too similar for the students to differentiate. The feature for this week was selected to increase the distance between the sounds of the two features. The feature words were *sheep, fish, thing*, and *bath*.

Day One: Word Walk, Group Closed Sort, Individual Closed Sort

Day Two: Individual Closed Sort. Students self-checked and then checked each other's work, finally they recorded their lists on sheet of paper with the feature words written on them.

Day Three: Concentration

Day Four: Off

Day Five: Individual Closed Sort. Students self-checked and then checked each other's work; finally they recorded their lists on sheet of paper with the feature words written on them.

Day Six: Word Walk, Blind Sort on chalkboard

During the previous three weeks it had become apparent that the students were relying heavily on the visual cues of the words and paying little attention to the actual sounds of the individual features. It was therefore decided by the researcher to begin using pictures to force students to concentrate on the feature sounds. So on day six five word cards were removed and replaced with pictures of the same words (see appendix B for the second list of words and pictures).

Day Seven: Concentration

Day Eight: Off

Day Nine: Word Hunt, students went through literature they were familiar with, found words, discussed them, and recorded them.

Day Ten: Off

Week Seven and Eight

Features: short *a* and *i*

After several weeks of working on the digraphs *ch*, *sh*, and *th* and working with the students in reading groups it became very clear that the students were really struggling with short vowels. It seemed to be a feature that they should have mastered but had not. They were not able to differentiate what short vowels to use in their writing when answering questions. Therefore, the researcher decided to switch from the digraphs to short vowels. Several 'big' words were chosen from the content areas: Saturn was chosen because the class was studying planets, but the feature was underlined so the students were not overwhelmed (Saturn); and Saturday was selected because it is a word third graders should be familiar with and again the feature was underlined. Finally, it should be noted that *a* and *i* were selected because their sounds are different enough to not confuse the students. When selecting short vowels you never select vowels that are next to each other (Ganske, 2000).

Day One: Word Walk. Group Closed Sort. During the Word Walk it became necessary to review the concept of long and short vowels. The discussion focused on how long vowels say their names and short vowels don't say the name of the letter. This week the students also began working with a mirror. Students took turns saying the words and looking at the shape of their mouths when they said the different words. They

shared with the researcher their observations that the short *a* words made them open their mouths wide while the short *i* words did not. During the Word Walk the students were really struggling with the words that ended in *ing* and so it was agreed to make that a separate category.

Day Two: Individual Closed Sort. Students self corrected and then checked each other's work.

Day Three: Concentration

Day Four: Off

Day Five: Individual Closed Sort. Students self corrected and then checked each other's work.

Day Six: Blind Sort on chalkboard. Students had to say the word while looking at the mirror before they could record their answers. They also had to say the word out loud.

Day Seven: Word Hunt, around the room.

Day Eight: Off

Day Nine: Word Hunt, students went through literature they were familiar with, found words, discussed them, and recorded them.

Day Ten: Speed Sort: Students competed against each other to see who could sort the words correctly the fastest. Concentration

Weeks Nine and Ten

Features: short *a, i,* and *u*

Day One: Word Walk, Group Closed Sort, Individual Closed Sort

Day Two: Individual Closed Sort. Students self corrected and then checked each other's work.

Day Three: Concentration

Day Four: Off

Day Five: Word Hunt, students went through literature they were familiar with, found words, discussed them, and recorded them.

Day Six: Blind Sort on chalkboard. Students had to say the word while looking at the mirror before they could record their answers. They also had to say the word out loud.

Day Seven: Concentration

Day Eight: Lily Pad Board Game. The object of the game is to get from one end of the board to the other by hopping from lily pad to lily pad. Each lily pad has word with the feature on it. Students take turn spinning the spinner. The spinner lands on a picture of one of the three features and they must find a word on the board to match the features, then they proceed to that spot on the board (see appendix C for a copy of game and instructions on how to assemble).

Day Nine: Off

Day Ten: Speed Sort

Weeks Eleven and Twelve

Features: short e, i, and o

Day One: Word Walk, students spent a few minutes looking at the movements their mouths made when they said the various short vowels and short vowel words. Group Closed Sort, Individual Closed Sort

Day Two: Individual Closed Sort. Students self corrected and then checked each other's work.

Day Three: Lily Pad Board Game

Day Four: Concentration

Day Five: Word Hunt, students went through literature they were familiar with, found words, discussed them, and recorded them.

Day Six: Speed Sort. Blind Sort on chalkboard. Students had to say the word while looking at the mirror before they could record their answers. They also had to say the word out loud.

Day Seven: Off

Day Eight: Lily Pad Board Game

Day Nine: Concentration

Day Ten: Around the Room Word Hunt. Students went around the room and searched for words with the appropriate features. They then discussed them and recorded them.

Instrument

The Screening Inventory used to determine a child's stage of development and was developed by Ganske (2000). The Inventory was administered in the manner of a traditional spelling test: a word was said, then used in a sentence, and finally said again. Students were encouraged to try and spell every word, and they were informed that this was not a graded test. The Inventory is broken up into four sections containing five words each. The first section contains words from the Letter Name Stage, then the

Within Word Stage, the Syllable Juncture Stage, and finally the Derivational Constancy Stage.

The Inventories were scored according to the procedures laid out in Ganske's book (2000, 28-32). Students were awarded a point for each word they spelled correctly, however if a child spells less then one word correctly in any set of five the rest of the paper is not scored. The score is marked on the top of the paper and the students' stages were determined (see appendix A for a copy of the Screening Inventory and breakdown of the Inventory Scoring). The Screening Inventory was used to determine which Feature Inventory students should complete. However, everyone who scored between the Letter Name Stage and Within Word Stage took both of those Inventories even if they scored above or below the Stage. This was done to keep things in the class fair and equitable. It was also done because it was easier at the time to give the whole group both Feature Inventories instead of moving students around so much.

The Feature Inventory was used to determine the particular features of words that students had a mastery of and those they needed to study. These Inventories were given in the same manner that the Screening Inventory was given. However, the scoring for these Inventories was quite different (copies of the Letter Name and Within Word Stages can be found in appendix A, along with the scoring procedures).

To score the Feature Inventory two points are given for every word spelled correctly, one point for every word where the whole word is spelled incorrectly but the targeted feature is spelled correctly, and zero points if the word and feature are missed. For example: if the word *cat* is spelled *cat*, then two points were given; if the word *cat* was spelled *kat* but the feature targeted was short vowels then the student received one

point; if the same word was spelled the same way and the feature was beginning letters then the student received a score of zero.

After the completion of the Word Study treatment, the two participating students took both the Screening Inventory and the two Feature Inventories they had previously taken. The scores were compared and assessed.

Chapter Four

Data Analysis

Introduction

Resent reports have put forth the idea that spelling abilities of children improve when instruction is targeted at existing levels of orthographic knowledge, and when instruction includes discovery-based, interactive activities (Bear, Invernizzi, Templeton, & Johnston, 2000; Ganske, 1999). Word study is such an approach and it was hypothesized by the researcher that this type of guided on-level instruction and interactive word activities, would produce a greater positive change in the spelling abilities of third graders who participated in a Word Study program than third grade students who did not.

The entire class took a series of pretests to determine their existing orthographic spelling knowledge. From there the experimental group was chosen to receive the word study treatment. The treatment consisted of on-level word study activities that were discovery-based, interactive and engaging.

Results

The mean score change for the control group in the Letter Name testing stage was a positive 5.238% while the mean score change for the treatment group in the Letter Name testing stage was a positive 72.435%. The mean score change for the control group in the Within Word testing stage was a positive 25.75% while the mean score change for the treatment group in the Within Word testing stage was a negative 11.43%.

table 1

Changes in Control Group and Treatment Group

	Control Group	Treatment Group
Letter Name	5.238%	72.435%
Within Word	25.75%	-11.43%
Overall	15.494%	30.503%

The difference of change between the two groups is significant as there was a 15.495% greater overall change by the treatment group than the control group. The treatment group also had a 67.197% greater change in the Letter Name Stage than the control group. This is important because the Letter Name Stage was the area where the treatment was given. Therefore, these results are more significant than the changes that took place in the Within Word Stage, where no treatment was given to either group.

A change that is highlighted by table 1 is the difference in growth between the control group at the Within Word Stage, the area where treatment would have been applied, and the growth of the treatment group at the Letter Name Stage. The control group had a positive change of 25.75% while the treatment group had a positive change of 72.435%. These results are telling because there was a difference of 46.685% in favor of the treatment group.

The next area referenced is the mean changes within the treatment group focusing on the specific features that treatment received. The major focus of treatment was on the Short Vowel Stage or Feature C. The mean score on the pretest in was 3.5 (out of 5)

while the mean score on the posttest was 5 (out of five), representing a positive change of 75.000%. The mean score on the Affricates or Feature D pretest in was 3 (out of 5) while the mean score on the posttest was 4 (out of five), representing a positive change of 62.50%. The mean score on the Final Consonant Blends and Digraphs or Feature E pretest in was 3 (out of 5) while the mean score on the posttest was 4.5 (out of five), representing a positive change of 50.00%.

table 2

Changes in the Treatment Group

	Pretest Mean	Posttest Mean	Mean Change
Short Vowels (C)	3.5	5	75.00%
Affricates (D)	3	4	62.50%
Final Consonant Blends and Digraphs (E)	3	4.5	50.00%

The changes highlighted in table 2 are significant to note because they represent the growth of the students in the treatment group who made considerable gains in the areas which the received treatment. There was a positive mean change in the three features that received treatment of 62.50%. This denotes that the treatment group gained skills, confidence, and increased orthographic knowledge in the focused areas.

Word study, guided on-level instruction and interactive word activities, is a significant method of improving student's spelling abilities. The hypothesis of this project was confirmed. However, due to the small sample size of the treatment group (N=2) there could be no statistical significance or generalizability for this project. The findings of this research could provide a starting point for further research, which could be based on reproducing this experiment.

Chapter Five

Summary, Conclusions, and Recommendations

Introduction

Traditional spelling programs have focused on rote memorization and been common to classrooms since 1783 when Noah Webster claimed there was little or no logic or pattern to their spelling (Coiner, 1995). Since the late 1950s research has found this claim invalid. Currently, literacy experts are using this research to base spelling instruction upon known as Word Study. Word Study involves word-play activities and categorization sorts, which have students investigating the patterns in words while becoming knowledgeable spellers who no longer rely solely on memory (Bloodgood, 1997, p. 204).

Summary of the Problem

Despite studies, which have shown the success of child-centered spelling instruction which begins at a student's existing stage of orthographic knowledge, schools remained focused on memorization of arbitrary lists of spelling words often unrelated to other aspects of the curriculum. The solution to this current situation may very well be a systematic approach to spelling called Word Study. Word Study can be defined as several things, this particular project will focus on word study as it has been used and written about by Kathy Ganske: "a student-centered approach to phonics, spelling, and vocabulary instruction that actively engages the learner in constructing concepts about the way words work" (Ganske, 2000, p. 332).

Summary of the Hypothesis

It was hypothesized that third graders who engaged in a Word Study program, including guided on-level instruction and interactive word activities, would have a greater positive change than third graders who followed a traditional spelling program involving rote memorization.

Summary of the Procedure

The entire third graded class took a series of pretests to determine their existing orthographic spelling knowledge. Following the testing procedures an experimental group was chosen to receive the word study treatment. The treatment consisted of on-level word study activities that were discovery-based, interactive and engaging. Following twelve weeks of treatment the entire class was post tested and results were analyzed.

Summary of the Findings

The findings of this project have no statistical significance. Therefore, they should be seen as a point from which future research can depart from or replicate. The treatment group's overall changes were greater than those of the control group. This is important because the findings confirm the hypothesis that third graders who engaged in word study will have a greater positive change in spelling abilities than third graders who do not. There was a 15.495% greater overall change by the treatment group than the control group in the two featured areas. The area which treatment was applied to the treatment group showed a positive change of 46.685% greater than the change in the areas of the control group where treatment would have been applied. Finally, there was a positive mean change in the three features that received treatment of 62.50%. These

results confirm the researchers hypothesis and further research may yield statistical significance.

Conclusions

The findings of this project have shown that there is an increase in orthographic knowledge and spelling abilities when word study was used as the primary form of spelling instruction. A discovery-based approach to spelling increased students' engagement with words beyond rote memorization to daily interactive activities. Clearly, this approach allowed students to discover, recognize, and use the infinite nuances that are present in the English language. Additionally, the students enjoyed the daily games and interactive activities that are the core of the program.

The implications of this research go beyond the benefit shown for students, there are several considerations to be considered for teachers. For instructors this approach allowed visible growth and children's strengths and weaknesses to be known intimately. The interactions between students and teachers allowed the researcher to learn more about students' orthographic knowledge and understanding of words. This is an important issue as teachers are then able to create programs based on this knowledge. The students who began learning from their point of readiness were empowered when they saw their improvement rather than discouraged by their inabilities to memorize an arbitrary list of spelling words. Finally, students gained skills, which will help them in the future, skills not gained by the traditional method of memorizing words.

Implications and Recommendations

The researcher finds that further replications of this study may perhaps yield the statistical significance that the small scope of this study could not. It is not important for

replications of this study to focus on the Letter Name and Within Word Stages; any of the four stages could be targeted. Instead it would be more important for future researchers to maintain the integrity of the study and Word Study in general. This would include the researcher using interactive and discovery-based activities beginning with student existing knowledge and building upon them.

It would be beneficial to discover whether treatment applied to students in the Syllable Juncture and Derivational Constancy Stages would demonstrate the same type of changes. The researcher believes there is no reason they would not. The researcher suggests further attempts to study the effects of Word Study might focus on strong spellers instead of weak spellers. Additionally, it might be of benefit to the Word Study movement to see the effects on average spellers. Future endeavors might also focus on conducting Word Study activities with a whole class. The Word Study movement is an important change in the approach to teaching children to spell and is one that seems to be quite successful.

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Appendix A

Screening Inventory
Feature Inventories
Scoring Description

Directions: I am going to say some words that I want you to spell for me. Some of the words will be easy to spell, and some will be more difficult. When you don't know how to spell a word, just do the best you can. Each time, I will say the word, then use it in a sentence, and then I will say the word again.

1. hen	The hen sat on her eggs.
2. wish	The boy made a wish and blew out the candles.
3. trap	A spider web is a trap for flies.
4. jump	A kangaroo can jump high.
5. brave	A brave dog scared the robbers.

* * *

6. smile	A smile shows that you're happy.
7. grain	One kind of grain is called wheat.
8. crawl	The baby can crawl but not walk.
9. clerk	The clerk sold some shoes to me.
10. clutch	The clutch in the car needed fixing.

* * *

11. palace	The king and queen live in a palace.
12. observe	I like to observe birds at the feeder.
13. shuffle	Please shuffle the cards before you deal.
14. exciting	The adventure story I'm reading is very exciting.
15. treason	The man was found guilty of treason.

* * *

16. column	His picture was in the first column of the newspaper.
17. variety	A grocery store has a wide variety of foods.
18. extension	The workers need an extension ladder to reach the roof.
19. competition	There was much competition between the two businesses.
20. illiterate	An illiterate person is one who cannot read.

Stop when a child has spelled 0 or 1 word correctly out of any set of 5.

FIGURE 2-1. The DSA Screening Inventory.

DSA Form A: Letter Name Feature List

1.	jet	The jet made a safe landing.
2.	ship	The ship sailed across the water.
3.	bet	I bet you will finish the book today.
4.	got	The boy got a new dog.
5.	cap	The new baseball cap was red.
6.	drum	We could hear the drum beat.
7.	bump	The bump on his head hurt.
8.	much	The boy didn't have much homework.
9.	with	My brother will come with us.
10.	map	The woman looked at a map of the city.
11.	hop	A rabbit can hop.
12.	plan	The class will plan a party.
13.	that	What is making that noise?
14.	slid	The player slid into second base.
15.	mud	There was mud on the floor.
16.	grab	She had to grab her hat in the wind.
17.	chop	Please chop the carrots into pieces.
18.	fast	The girl is a fast runner.
19.	dish	The dish fell and broke.
20.	went	The car went past our house.
21.	win	Let's try to win the game.
22.	fed	The farmer fed the cow hay.
23.	trip	The family took a trip to the beach.
24.	rub	I will rub the penny to make it shine.
25.	fit	The dress did not fit the girl.

DSA Form A: Within Word Pattern Feature List

1. patch The pirate had a patch over his eye.
2. couch His grandmother sat on the couch reading.
3. steep The hill was very steep.
4. cute Everyone thought the baby was cute.
5. bridge The bridge had to be fixed.
6. glare The glare of the sun made it hard to see.
7. scrap A scrap of paper was found on the floor.
8. might It might rain tomorrow.
9. girl The girl opened the envelope.
10. frown You could tell by her frown that the woman was upset.
11. smoke Smoke came out of the chimney.
12. flock A flock of geese flew overhead.
13. stood The boy stood on his tiptoes to reach the box.
14. least The opposite of *most* is *least*.
15. short The girl has short hair.
16. quite It is quite sunny outside today.
17. grape The grape juice tasted good.
18. yawn When you're tired, you sometimes yawn.
19. drive They will drive to the grocery store.
20. coast It's fun to coast downhill on a bicycle.
21. hurt The old man fell and hurt his back.
22. point The teacher asked the child to point to the letter *b*.
23. ripe A banana is ripe when it is yellow.
24. fear He has a fear of the dark.
25. paint The men were going to paint the house.

In order to tailor instruction appropriately for children, it is important for teachers learn about their students' orthographic understandings. As previously discussed, ong ing monitoring of students' writing is one part of the information-gathering process (s Laminack & Wood, 1996, for a discussion of evaluating spelling in context); periodic a sessment with a dictated word inventory, such as the Developmental Spelling Analy (DSA), is another.

I devised the DSA with teachers in mind. Teachers typically have classes of 20 to students and many curricular demands to meet. The often difficult and time-consumi process of analyzing and interpreting children's spellings for instructional purposes nee to be quick and easy. The DSA enables teachers to readily and confidently ident children's stages of spelling development, highlight specific strengths and weaknesses featural knowledge so instruction can be timely and appropriate, and monitor progr over time. The DSA includes a Screening Inventory and two different, but parallel, Fe ture Inventories. The Screening Inventory identifies the developmental spelling stage students. The Feature Inventories provide more specific information and are used determine the particular instructional needs of students. Both components may be us with individuals, small groups, or an entire class. This chapter describes how the inv tories are used. A summary of the key steps appears at the end of the chapter for futu reference.

THE SCREENING INVENTORY

The main purpose of the Screening Inventory (Figure 2-1) is to determine a child's st of development so that the appropriate portion of the Feature Inventory can be dictat The screening device consists of 20 words that become progressively more difficult. T words are grouped into sets of five, with each set focusing on a different stage of w knowledge, beginning with letter name. Although the Screening Inventory has been fo to accurately identify a child's stage of development over 90% of the time (Ganske, 19 it is not intended for repeated use with the same students. Once a child's stage of sp ing development is initially established and the Feature Inventory is used, the Screen Inventory is no longer necessary.

Dictation

Consider the following guidelines before starting:

1. Be familiar with the inventory.
2. Minimize distractions, and encourage a relaxed atmosphere. I let students k that I will not be grading their papers but will instead use the informatio understand how to help them learn more about words.

Directions: I am going to say some words that I want you to spell for me. Some of the words will be easy to spell, and some will be more difficult. When you don't know how to spell a word, just do the best you can. Each time, I will say the word, then use it in a sentence, and then I will say the word again.

1. hen	The hen sat on her eggs.
2. wish	The boy made a wish and blew out the candles.
3. trap	A spider web is a trap for flies.
4. jump	A kangaroo can jump high.
5. brave	A brave dog scared the robbers.

* * *

6. smile	A smile shows that you're happy.
7. grain	One kind of grain is called wheat.
8. crawl	The baby can crawl but not walk.
9. clerk	The clerk sold some shoes to me.
10. clutch	The clutch in the car needed fixing.

* * *

11. palace	The king and queen live in a palace.
12. observe	I like to observe birds at the feeder.
13. shuffle	Please shuffle the cards before you deal.
14. exciting	The adventure story I'm reading is very exciting.
15. treason	The man was found guilty of treason.

* * *

16. column	His picture was in the first column of the newspaper.
17. variety	A grocery store has a wide variety of foods.
18. extension	The workers need an extension ladder to reach the roof.
19. competition	There was much competition between the two businesses.
20. illiterate	An illiterate person is one who cannot read.

Stop when a child has spelled 0 or 1 word correctly out of any set of 5.

FIGURE 2-1. The DSA Screening Inventory.

3. Instruct students to print their responses on the reproducible answer sheet found in Appendix 2 so that scoring will be easier. Sharpened pencils also help.
4. Speak clearly and distinctly when reading the items, but avoid over-emphasizing parts of the target word.
5. Dictate the number of the item, say the word, read the sentence, and then repeat the word before moving on to the next item. (Primary grade teachers may omit the sentence if the children find it distracting.)
6. Allow sufficient time for students to respond, but move along quickly.
7. Encourage reluctant spellers to write what they can.

Begin by dictating the first set of five words. Continue dictating succeeding sets as long as students are able to spell at least two of the words within the set. *As soon as someone spells only one or none of the words correctly, that child may stop.* In a small-group or individual setting, it is easy to monitor who should stop when. However, when a whole class is being assessed, use one of the following alternative approaches. Dictate the entire list to all students, watching for anyone who may be frustrated by words beyond the stopping point, so that you can quietly tell them they may stop if they wish. In classrooms where children's efforts at representing "big words" are routinely encouraged and respected, even the very young are usually willing to try. The dictation may also be spread out over more than one day, enabling you to review the results and determine which students need to stop. Regardless of which alternative you choose, be sure to observe the above criterion for stopping when scoring the papers.

Scoring

Score the Screening Inventory by awarding one point for each correctly spelled word. *If a child completed any sets of words beyond the stopping point, these words receive scores of zero, regardless of their spelling accuracy.* Record the number of correctly spelled items at the top of each child's paper. To identify the likely stage of development, locate the child's score on the chart in Figure 2-2.

As the chart reveals, a few scores suggest two possible stages instead of one. Students in transition from one stage to another tend to achieve scores at the upper end of one set or at the lower end of the following set—namely, scores of 5 or 6, 10 or 11, 15 or 16. These individuals often vary in their actual stage of development. For example, some students with scores of 10 or 11 are within word pattern spellers, while others are at the syllable juncture stage of development. Because of this variation, both stages are listed as possibilities. Performance on the Feature Inventory is used to determine which stage is more appropriate.

Students with scores of 1 or 0 on the Screening Inventory also tend to vary in their stage of development. Those with scores of 1 may or may not be at the letter name stage. Sometimes children achieve this score due to familiarity with a specific word on the list, and yet on the whole, they may not exhibit spelling knowledge characteristic of this stage. By contrast, a child who is unable to spell any of the first five words correctly may nonetheless exhibit considerable knowledge of individual spelling features. A close look at the

Inventory score	Predicted stage(s)
20	DC
19	DC
18	DC
17	DC
16	SJ/DC
15	SJ/DC
14	SJ
13	SJ
12	SJ
11	WW/SJ
10	WW/SJ
9	WW
8	WW
7	WW
6	LN/WW
5	LN/WW
4	LN
3	LN
2	LN
1	LN*
0	LN*

*Children who achieve scores of 1 or 0 may or may not be letter name stage spellers.

FIGURE 2-2. The Screening Inventory prediction chart: Identifying students' stage(s) of development from the Screening Inventory.

spellings of these children can determine the value of progressing with the Featu ventory. In general, if the spellings indicate attention to initial and final sounds, a pecially if a vowel has been included, dictation of the letter name portion of the F Inventory is recommended.

After you have identified a child's likely stage(s) of development on the chart the result on the answer sheet by circling the appropriate letter at the top: *L* for name, *W* for within word pattern, *S* for syllable juncture, or *D* for derivational cons When this process is complete, information can be gathered from the Feature I tory. The Screening Inventory snapshots of Chris and Tracy in Figure 2-3 illustrate this process works.

THE FEATURE INVENTORIES

Two different Feature Inventories, Forms A and B, were developed for the DSA so children would not become overly familiar with certain words as a result of repeated Each inventory has separate lists for the letter name, within word pattern, syllable j ture, and derivational constancy stages of word knowledge. The individual lists cor 25 words that focus on five different spelling features. Although the words are diffe for the two inventories, the orthographic features are the same.

The Feature Inventories are designed for flexible use and enable teachers to ch between a brief assessment option and a more comprehensive one. The procedures the two are similar. The primary differences are that the brief approach provides te ers with less information and takes less time to administer than the more comprehen approach.

With the brief option, information is gathered about a child's stage of developm only. This provides useful instructional information and entails minimal dictation of wo Students with LN predicted as their stage complete the letter name list; those with W complete the within word pattern list; those with LN and WW complete both; and so This option enables teachers to determine which features are areas of strength, wh seem to be relatively weak, and how well the child can accurately spell words at this sta thereby making it easy to plan appropriate instruction.

The comprehensive option provides the same instructional information as the br approach. However, because it is more extensive, it enables teachers to assess the f range of a child's word knowledge, not just stage of development performance. Wh this makes the process somewhat more time-consuming, it insures that students beg responding to words that are relatively easy to spell, thereby building their confidenc The information that results from this approach leads to a *total inventory score*, which useful for following children's progress from year to year as well as for comparing t progress of students.

One method is not better than another. The choice is a matter of the teacher's pu pose, which may differ over the course of a school year. Most teachers prefer to gath comprehensive data once or twice a year to document overall progress, but rely on sta

Screening Answer Sheet

Name Chris L.

Date Sept. 9

+6 (L) (W) S D

1. hen
2. wish
3. trap +5
4. Jump
5. Brave
6. smile
X. Grane
X. cral +1
X. Cleik
10. cloach (Stop)
11.
12.
13.
14.
15.
16.
17.
18.
19.
20.

Screening Answer Sheet

Name Tracy H

Date Sept. 10

+12 L W (S) D

1. hen
2. wish
3. frap +5
4. jump
5. brave
6. smile
7. grain
8. crawl +4
X. clirk
10. clutch
11. palace
X. obsurve
13. shuffle +3
X. exciteing
15. treason
X. colum
X. veriaty
X. extinchin +0
X. compotition
X. iliderat

Chris spelled the first set of words correctly. But since he was able to spell only one of the second set, he did not attempt any more words. His score is 6. According to the chart in Figure 2–2, Chris is either a letter name or a within word pattern speller. Because both stages are possibilities, the *L* and the *W* are circled at the top of Chris's answer sheet.

Tracy completed all 20 words. She spelled 9 of the first 10 words accurately, plus *palace*, *shuffle*, and *treason* in the third set, before missing the entire last set. Tracy's score of 12 corresponds to the syllable juncture stage on the prediction chart, so S has been circled at the top of her paper.

FIGURE 2-3. Screening Inventory snapshots: Chris and Tracy.

of development information from the brief option at other times to keep them abreast of instructional needs. By supplementing the assessment results with regular observations of children's writing, teachers will be well prepared to make sound instructional decisions.

Whether to use Feature Inventory A or B at a given time is also a matter of choice. However, if an entire school or school division is using the DSA, it is best to come to agreement about when to use which form. This adds consistency to the process. Many schools base the decision on how the assessment is being used—one form for the brief option and the other for the comprehensive. Others specify that a certain form be used for a given reporting period—for example, Form A for the first and fourth quarters, and Form B all other times. At any rate, *dictating one inventory form more than twice to a child during a year is strongly discouraged.* It should not be necessary and could reduce the measure's reliability.

A detailed description of the comprehensive assessment option is presented below. Because the same general directions apply to the brief approach, it is not explained separately. The main procedural difference is that dictation for the brief option is done at the child's indicated stage(s) of development only, unless resulting performance on this list is stronger or weaker than expected. Such instances are few, but when the predicted stage proves not to be the actual stage of development, the previous or following list will also have to be dictated. An additional difference associated with the brief option is fewer scores to record, including no total inventory score.

Dictation and Scoring

Starting the Dictation

Make a list of which students will start at which stage. When determining these starting points, be sure to drop back one stage from that indicated by the Screening Inventory. For students with two suggested stages, go back one from the earliest stage predicted. For example, students who have within word pattern as their likely stage will begin with the letter name list. Those with predicted stages of within word pattern and syllable juncture will begin with the letter name list also. Because you cannot drop back a stage for predicted letter name spellers, they too will begin with the letter name list. Although dropping back is beneficial to most students, it is especially advantageous for children who have just moved into a new stage, because starting at their stage of development is likely to mean responses with many errors.

Once the list is compiled, begin dictation with the earliest stage needed. In most cases, this will be the letter name list. Oral directions are included at the beginning of each Feature Inventory form. The same general guidelines that were described for dictating the Screening Inventory should be kept in mind.

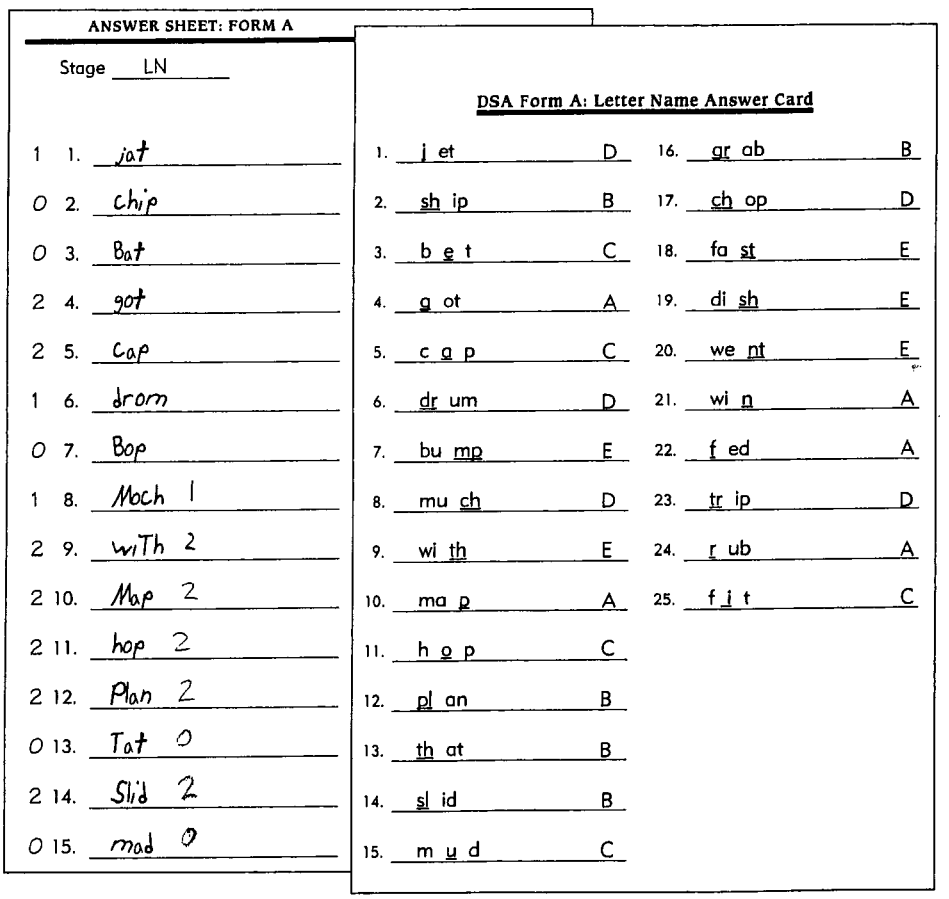
Scoring

Score all answer sheets for the first dictated list before dictating the next. The Feature Inventories are scored qualitatively so that children's knowledge of specific orthographic

features can be determined as well as their ability to correctly spell entire words. The following point system is used:

2 = entire word is correctly spelled
1 = targeted feature is correct; entire word is not
0 = targeted feature is incorrect

Answer cards facilitate the scoring process. The cards have the targeted feature underlined and can be aligned with a student's answer sheet (see Figure 2-4). By placing the student's paper next to the corresponding answer card, it is easy to determine the amount of credit to award each word. The appropriate 2, 1, or 0 value is recorded beside each item. Letter reversals, such as *b* for *d*, are not considered errors.



ANSWER SHEET: FORM A

Stage LN

1	1.	jat
0	2.	chip
0	3.	Bat
2	4.	got
2	5.	Cap
1	6.	drom
0	7.	Bop
1	8.	Moch 1
2	9.	wiTh 2
2	10.	Map 2
2	11.	hop 2
2	12.	Plan 2
0	13.	Tat 0
2	14.	Slid 2
0	15.	mad 0

DSA Form A: Letter Name Answer Card

1.	j et	D	16.	gr ab	B
2.	sh ip	B	17.	ch op	D
3.	b e t	C	18.	fa st	E
4.	g ot	A	19.	di sh	E
5.	c a p	C	20.	we nt	E
6.	dr um	D	21.	wi n	A
7.	bu mp	E	22.	f ed	A
8.	mu ch	D	23.	tr ip	D
9.	wi th	E	24.	r ub	A
10.	ma p	A	25.	f i t	C
11.	h o p	C			
12.	pl an	B			
13.	th at	B			
14.	sl id	B			
15.	m u d	C			

FIGURE 2-4. An answer card scoring example.

Determining Stage Scores

Once the items are scored, *tally* the number of *correctly spelled* words (those with a score of 2), and note the result at the top of the paper. Keep in mind that tally means to count, not add. The tallied result is the overall score for that stage. *Stage scores cannot exceed* 25, since there are only 25 words.

Dropping back a stage means that the first list should be one where most students exhibit strong understandings. In most cases, the stage scores on a student's initial list will fall in the range of 22 to 25. Those who are novice spellers at the letter name stage of development obviously are not starting out at a stage earlier than their predicted stage of development, and therefore they are not likely to perform as well. If a student does not achieve a score demonstrating confidence (22 to 25) on the first list and if that list was not the letter name list, it will be necessary at some point to drop back yet one more stage for this student.

Dictating the Next Feature List

The second feature list may be dictated the same day or on a subsequent day. Students responding to the words should include (1) those with the following stage as their predicted stage (the new "drop-back" group) and (2) all students who achieved stage scores of 12 or greater on the list just completed. Students with stage scores in the range of 0 to 11 do not need to proceed further. After the dictation, score the responses as described above.

Continuing the Process

Repeat the above steps until all students have a set of stage scores that demonstrate the full range of their word knowledge. In general, this means scores that extend from a level of confidence (22–25) down to relative weakness (0–11). However, novice spellers may not be able to achieve a score of 22 or greater, and advanced spellers may never attain scores as weak as 11.

Stage scores between 12 and 21 are indicative of a child's stage of development. Such scores reflect spelling features that are within the learner's zone of proximal development. In other words, the child shows some understanding of the features presented but not a complete grasp of them. It is here that instruction should be directed. By contrast, scores above 21 reveal few errors and little need for instructional support. Those below 12 suggest much confusion on the part of the speller and too many new issues to negotiate.

Occasionally, a score in the 0 to 11 range is used as the basis for determining a student's stage of development. This occurs when a child demonstrates confidence at one stage but falls short of reaching the stage of development range on the next. These children are in transition and are most often moving from the letter name stage to within word pattern. Spellers of this type are referred to as *early* (such as early within word pattern spellers). Figure 2-5 presents a summary of how to interpret stage scores.

Stage score (correctly spelled words)	Observations
22–25	**Secure Understandings** The speller is competent and confident at this stage and demonstrates firmly developed understandings.
12–21	**Stage of Development** The student is confronted with new spelling issues that challenge existing understandings about how the orthographic system works. As the student revises and refines previous notions in light of new information, features are likely to be used correctly at times but confused at others.
Below 12 (but with strong scores, 22–25, on the previous stage)	**Early Stage of Development (WW, SJ, DC)** Although there is much at this stage that the speller hasn't yet figured out about the spelling system, the student has a solid base of understandings from which to progress.
Below 12*	**Too Much Is Unknown** Without a firm understanding at the previous stage, scores below 12 reflect an overload of new issues. The logic behind the child's spelling is likely to deteriorate; even random spelling may occur.

**Note.* Because there is no prior list at the letter name stage, spellers with feature knowledge that indicates letter–sound association, such as B or BT for *bet*, may be considered *early letter name* spellers.

FIGURE 2-5. Interpreting stage scores on the Feature Inventory.

Analyzing Feature Performance

After the dictation and scoring are finished, each child's feature performance needs to be analyzed. For most students, this means determining spelling strengths and weaknesses on one list—their stage of development list. Occasionally a student may have two stage scores that fall within the 12 to 21 range; if so, analyze both. In most cases, these are students who are in transition from one stage to another. Teachers also sometimes analyze two different lists for early spellers—the stage of development list and the previous one.

To learn how well students performed on a specific feature, tally the words that have this feature correctly represented. First, you will need to locate the five words that address the feature. This is easily done by referring to either the feature letters listed at the end of each line on the answer cards, or by using the words by feature chart found at the end of each Feature Inventory (see Figure 2-6). Once you have identified the five words,

DSA Form A: Syllable Juncture Answer Card

1.	f ur nace	N	16.	b ur den	N
2.	ma king**	K	17.	ba gg age*	L
3.	s o ber	L	18.	fount ai n	O
4.	compl ai nt	M	19.	expl o d e	M
5.	p il ot	L	20.	may or	O
6.	t er mite	N	21.	s a lute	O
7.	pol ar	O	22.	mi nn ow*	L
8.	pi ling**	K	23.	tro tted**	K
9.	cla pped**	K	24.	te nn is*	L
10.	esc a p e	M	25.	comp e t e	M
11.	dist ur b	N			
12.	tramp le	O			
13.	c ir cus	N			
14.	surv i v e	M			
15.	swi mming**	K			

*A vowel must follow the underlined letters. One must also *precede* the underlined letters in words 17, 22, 24.
**A *single* vowel must precede the underlined letters.

Words by Feature, Form A

LN Stage

A	B	C	D	E
4	2	3	1	7
10	12	5	6	9
21	13	11	8	18
22	14	15	17	19
24	16	25	23	20

WW Stage

F	G	H	I	J
4	6	3	1	2
11	9	8	5	10
17	15	14	7	13
19	21	20	12	18
23	24	25	16	22

SJ Stage

K	L	M	N	O
2	3	4	1	7
8	5	10	6	12
9	17	14	11	18
15	22	19	13	20
23	24	25	16	21

DC Stage

P	Q	R	S	T
5	1	10	4	3
8	2	21	7	6
13	9	23	11	12
18	17	24	15	14
19	20	25	16	22

FIGURE 2-6. Ways of identifying features.

count those with a score of 1 or 2. Record the results at the bottom of the answer sheet. Carry out the process for all five features. Scores will range from 0 to 5. It is usually easiest to complete the analysis for all students at one stage before moving on to another. Labels for the identifying feature letters are listed on the class record found in Appendix 2. For example, at the letter name stage, *A* represents *initial and final single consonants*, *B* stands for *initial consonant blends and digraphs*, *C* is used for *short vowels*, and so on. Figures 2-7 and 2-8 trace the Feature Inventory assessments of Chris, an early within word pattern speller, and Tracy, a syllable juncture speller (see Figure 2-3 for the screening results for Chris and Tracy). To practice scoring and tallying feature performance, see the student samples included in Appendix 2. Answers are included in Figure 8-2 at the end of Chapter 8.

Chris's Screening Inventory score of 6 suggested two possible stages of spelling development—letter name and within word pattern.

The tally of Chris's correct spellings on the letter name feature list reveals a stage score of 22, indicating that this stage is one of confidence for Chris. Not only did he miss just 3 of the words, but as the absence of any 0 scores shows, Chris accurately represented the feature in all 25 words. Two of Chris's misspellings, CAPE for *cap* and PLANE for *plan*, resulted from the addition of an e-marker. This type of overgeneralization of the silent *e* is common among children who are within word pattern spellers and strongly suggests that the within word pattern stage is Chris's actual stage of spelling development.

On the within word pattern list, Chris achieved a stage score of just 10, making this the last feature list he completed. Although Chris's score falls below the expected 12–21 stage of development range, within word pattern is nonetheless the stage at which Chris is ready for instruction. Because of his strong score on the letter name feature list and his relatively weak stage score on this list, Chris is considered an early within word pattern speller. Contrary to his

Stage LN Name Chris L.
Date Sept. 14
x22

2 1.	Jet	2 16.	Grab
2 2.	ship	2 17.	Chop
2 3.	Bet	2 18.	fast
2 4.	Got	2 19.	Dish
1 5.	cape	2 20.	went
2 6.	Drum	2 21.	win
2 7.	Bump	2 22.	fed
2 8.	much	2 23.	trip
2 9.	With	1 24.	rob
2 10.	Map	2 25.	fit
2 11.	hop		
1 12.	Plane		
2 13.	that		
2 14.	Slid		
2 15.	mud		

FIGURE 2-7. Feature Inventory snapshot of an early within word pattern speller: Chris.

performance on the letter name list, his achievement on the within word pattern list is characterized by many words with incorrect features. Clearly, Chris still has much to learn about the use of patterns in English spelling.

Feature analysis results for Chris's stage of development are noted at the bottom of his within word pattern answer sheet. As his strong performance on feature F shows, Chris is using a final e to mark long vowels. He spelled this feature correctly in all five of the targeted words (CUTE, SMOCE, GRAPE, DRIVE, and RIPE). However, Chris also used the final e to mark the long vowels in *steep*/STEPE, *might*/MITE, and *least*/LESTE. These spellings and his 0 score for this feature (H) indicate that Chris has not yet learned other common ways to mark the long vowel. His knowledge of *r-controlled vowel patterns*, feature G, is considerably stronger. As his correct spellings for *girl*, *short*, *fear*, and *hurt* demonstrate, Chris is beginning to use this feature with consistency. Although experimentation with *complex consonant units* and *abstract vowels* is apparent (*flock*/FLOCK, *stood*/STOUD, and point/POEINT), Chris's understanding of these features (I and J) is minimal.

Stage WW +10 Name Chris L.
Date Sept. 15

0 1.	pach	0 16.	qwite
2 2.	couch	2 17.	grape
0 3.	stepe	0 18.	yone
2 4.	cute	2 19.	Drive
0 5.	bridj	0 20.	Kost
0 6.	glaer	2 21.	hurt
0 7.	skrap	0 22.	poeint
0 8.	mite	2 23.	ripe
2 9.	girl	2 24.	fear
0 10.	frouen	0 25.	pant
1 11.	smoce		
2 12.	flock		
0 13.	stoud		
0 14.	leste		
2 15.	short		

F	G	H	I	J
5	4	0	1	1

FIGURE 2-7. (*cont.*)

Tracy's Screening Inventory score of 13 predicted the syllable juncture stage of spelling development. However, before dictating this list of the Feature Inventory, Tracy's teacher dropped back to the within word pattern stage. These words were expected to be relatively easy for Tracy, and indeed they were. She spelled 22 of them correctly. Strong feature performance is also noted at this stage. The only word with a 0 score is *glare*, which Tracy recorded as GLAIR.

Tracy's word knowledge at the syllable juncture stage is less secure. Her performance, typical of stage of development spelling, is characterized by the use and misuse of various spelling features. She correctly spelled 14 of the words but misrepresented the targeted feature in numerous other words. Tracy's spellings reveal that she is beginning to sort out the spelling issues at this stage. Appropriate activities that support her experimentation will make this process easier.

Because Tracy's stage score was in the 12 or greater range on the syllable juncture list, she also responded to words at the derivational constancy stage. However, her stage score on this list is minimal. The issues confronting her were just too many and too complicated.

The results of the feature analysis completed at Tracy's stage of development are shown at the bottom of her syllable juncture answer sheet. In order to

Stage WW Name Tracy H.
Date Sept. 14
+22

2 1. patch	1 16. quiet	0 1. elecrition	0 16. hostillady
2 2. couch	2 17. grape	0 2. impresfion	2 17. eruption
2 3. steep	2 18. yawn	0 3. inmachure	0 18. veicile
2 4. cute	2 19. drive	1 4. permisive	0 19 condem
2 5. bridge	2 20. coast	2 5. hymn	0 20. pervistion
0 6. glair	2 21. hurt	0 6. comend	0 21 admeration
2 7. scrap	2 22. point	0 7. grevinse	0 22. eresestabile
2 8. might	2 23. ripe	0 8. moisen	1 23. composistion
2 9. girl	2 24. fear	0 9. asumtion	1 24. majoraty
1 10. frowne	2 25. paint	0 10. exspination	0 25. confadent
2 11. smoke		0 11. dependend	
2 12. flock		0 12. acomadate	
2 13. stood		0 13. resighn	
2 14. least		0 14. safice	
2 15. short		0 15. encridibile	

Stage DC Name Tracy H.
Date Sept. 17
+2

(*cont.*)

FIGURE 2-8. Feature Inventory snapshot of a syllable juncture speller: Tracy.

determine the number of words with a correct feature, Tracy's teacher notes the identifying letter after each word with a correct feature and then simply counts the number of times a particular letter is recorded.

Two areas of strength are apparent in Tracy's use of the polysyllabic words that are the basis of syllable juncture spelling—her use of *long vowels* and *r-controlled patterns* (features M and N, respectively). Tracy accurately employed each of these features in four of the five words. COMPIETE and FERNACE are the two exceptions. The other three features indicate weaker understandings. Tracy shows a beginning awareness of the e-drop and doubling principles (feature K). She recorded *making* and *trotted* correctly but failed to apply the principles in *piling, swimming,* and *clapped.* Her understanding of *other syllable juncture doubling* (feature L) is also developing, as is her knowledge of *unstressed syllable patterns* (feature O).

Appropriate instruction in the features at the syllable juncture stage will enable Tracy to progress in her orthographic knowledge so that she will soon be able to handle the difficult challenges associated with spelling words at the next stage—derivational constancy.

Stage SJ

Name Tracy H.

Date Sept. 16

0	1.	fernace		2	16.	burden	N
2	2.	making	K	0	17.	bagage	
2	3.	sober	L	0	18.	fountin	
2	4.	complaint	M	2	19.	explode	M
2	5.	pilot	L	2	20.	mayor	O
2	6.	termite	N	2	21.	salute	O
2	7.	polar	O	0	22.	mino	
0	8.	pileing		2	23.	trotted	K
0	9.	claped		2	24.	tennis	L
2	10.	escape	M	0	25.	compiete	
1	11.	desturb	N				
0	12.	trampel					
2	13.	circus	N				
1	14.	sirvive	M				
0	15.	swiming					

K	L	M	N	O
2	3	4	4	3

FIGURE 2-8. (*cont.*)

Appendix B

Word List
Sorting Sheet
Word and Picture List

chop	much
chomp	such
chum	hush
chunk	rush
Chuck	blush
shop	cash
shot	dish
shut	rash

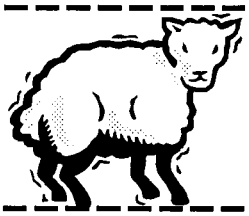
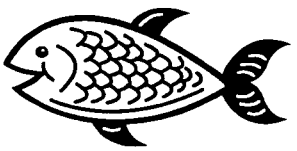
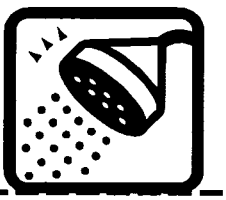
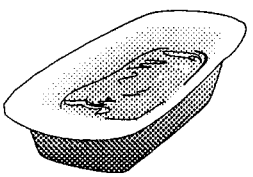
Number _____ Name _____ Date _____

chop

much

shop

dish

	with
	ship
	
wish	dish
thin	
thing	thud
	this
path	math

Appendix C

Lily Pad Game and Instructions

ACTIVITIES FOR SHORT VOWELS

Once students are automatic with word families it is time to study short vowels in non-rhyming CVC words. After this feature has been explored through word sorts and weekly routines, games can provide additional practice.

Hopping Frog Game 6-21

This game for two to four players reviews all five short vowels.*

Materials

1. Use a gameboard or make your own course with a manila folder. Cut green circle lily pads for each space and write CVC words students have used in word sorts on each one (e.g., *pin, get, hot, bad, leg, run, bug, wish*).
2. You'll need four frog markers. The spinner is marked into five sections, with a vowel and illustrating picture in each (*a,* apple; *e,* ten; *i,* fish; *o,* frog; *u,* sun). See the appendix for directions on how to make a spinner. Figure 6-20 shows you a sample board for the game.

*This game was developed by Janet Bloodgood and has become a favorite.

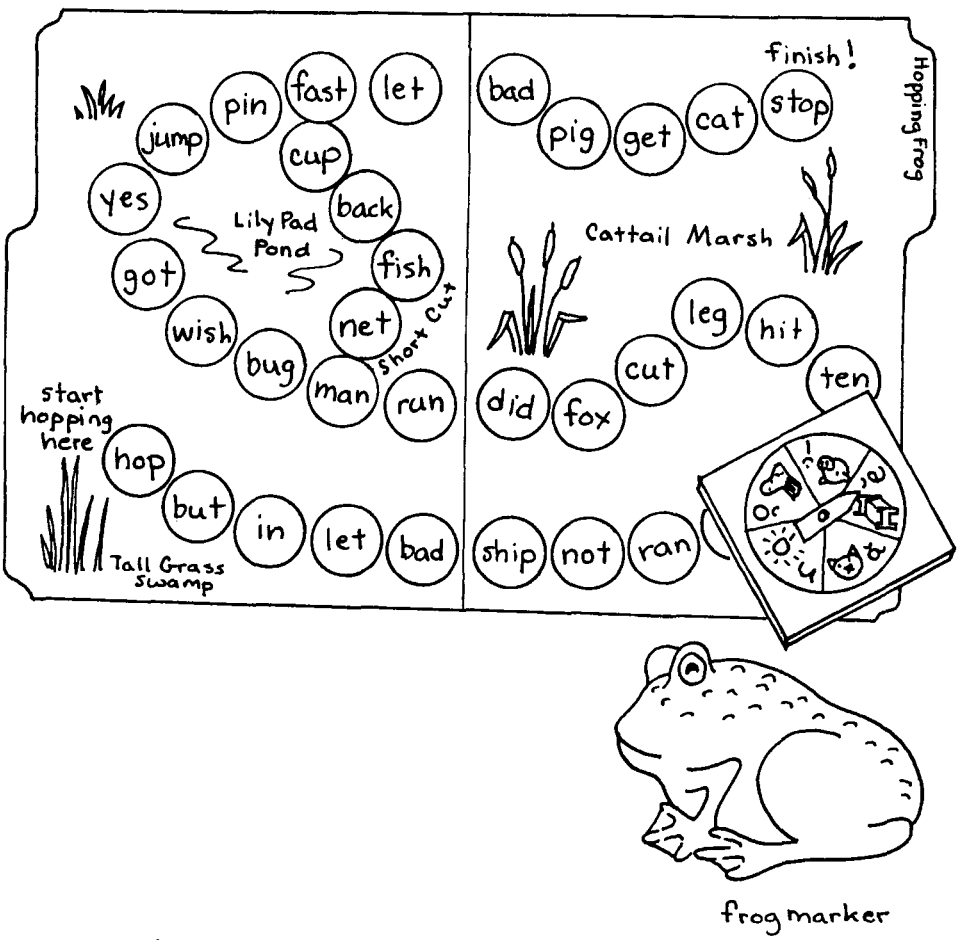


FIGURE 6-20 Frog Marker and Hopping Frog Game

Procedures

Each child selects a frog marker. Players take turns spinning, and place their marker on the first word that matches the vowel sound they land on (e.g., *e, get*). They then pronounce this word and must say another word with the same vowel sound to stay on that space. The next player then spins and plays. The first player who can finish the course and hop a frog off the board wins.

Variations

1. Students can write down the words they land on and organize them in columns by short vowel.
2. The same game plan could be used for long vowel patterns and inflected endings.

Making-Words-With-Cubes Game 6-22

Short vowel words are built with letter cubes in this game and it can be used for many other vowels as well.

Materials

Letter cubes that can be found in many games (Boggle and Perquackery) are needed. Playing pieces can also be made from blank wooden cubes. Write all the vowels on one cube to be sure that a vowel always lands faceup. Put a variety of consonants on five or six other cubes. (Pairs like *qu* and *ck* might be written together.) The students need a sand clock or timer, paper and pencil, and a record sheet such as the one shown in Figure 6-21.

Procedures

1. In pairs, students take turns being the player and the recorder. The recorder writes the words made by the player.
2. Letters are shaken and spilled out onto the table and the timer is started.
3. The word maker moves the cubes about to create words and spells them to the scribe. The letters can be moved around to make more words. Errors should be ignored at this point. Write the words in columns by the number of letters in the words.

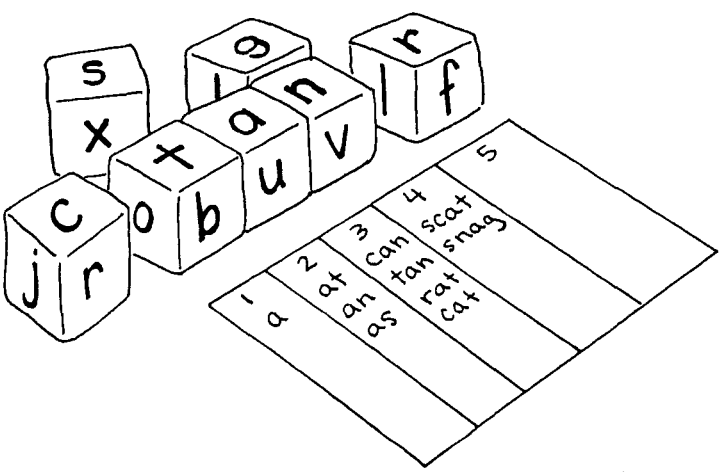


FIGURE 6-21 Making-Words-With-Cubes Game

VITA

Name:	Jessica Wright
Date and Place of Birth:	April 3, 1976 Rockville, CT
Elementary School:	Haines Elementary School
High School:	Shawnee High School
College:	University of Arizona B.A. Communication
Graduate:	Rowan University M.S.T. Elementary Education